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THE EVOLUTION OF THE PRINCIPLES AND LAWS ON IRRIGATION AND DRAINAGE IN THE UAR

By Jan NICOLA, B. Sc.,
Ministry of Works, UAR

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THE EVOLUTION OF THE PRINCIPLES AND LAWS OF IRRIGATION AND DRAINAGE IN THE UAR

Jan Nicola, B.Sc.
Ministry of Works, UAR.

PART I

Modification of the Law Relative to Irrigation and Drainage so as to keep Pace with Modern Methods of Water Use.

Introduction -

1. The fact that Egypt's agricultural production depends wholly on the River Nile as a source of water supply has rendered irrigation and drainage problems of paramount importance. It was thus essential to pay careful attention to the effectiveness of irrigation systems on the fertility of the soil and the growing of the different crops. The River Nile together with public canals and drains which are a part of the State Domains form the nucleus of the whole irrigation system in Egypt. For this reason, the administrative legislation, as far as it is concerned with irrigation problems, has given considerable attention to the reorganization of public use of irrigation and drainage methods, with a view to secure public interest and a fair distribution of water.

2. When it was shown by practice that the irrigation and drainage Regulations, in force before 1953, had many gaps to fill in the light of the modern patterns introduced to the irrigation system, the Government passed, in 1953, a comprehensive law reorganizing the use of irrigation and drainage methods. In addition to coded suitable items of the past regulations, the law comprises many chapters dealing with the special conditions necessary for the erection of pumps, irrigation of lands, flood protection measures and other irrigation concerns.

Properties of Individuals in General

3. Thanks to the 1953 laws that all individuals have found easy solutions to their many complicated problems of irrigation and drainage which were to cost them, in the past, a lot of time to get them settled, owing to the long formalities and slack official channels of the old regulations. According to this law, all applications and complaints could now be submitted by individuals, for consideration, directly to the competent Irrigation Services and not through the "Mudir" (Head of the Province' who was not the authority of concern. In this way, much time could be saved and the Administrative Authorities could be freed from many responsibilities which, in fact, ought not to be theirs.

On the other hand, the law has authorized the Irrigation Department to decide, within a certain period, on such applications and petitions reported to the Minister of Public Works. Thus, the slack in procedures, which was before the law, a matter of public complaints, has completely disappeared. Moreover, the law abolished Irrigation Committees and referred their responsibilities, with regard to irrigation and drainage penalties to the ordinary courts. This has greatly helped to secure the rights of individuals. In addition to this, severe penalties were imposed by the law on contravenants of irrigation and drainage principles. Accordingly, selfish and greedy persons who were, under the slight penalties of the past, free to abuse the utilization of irrigation and drainage methods, in a manner harmful to crop production of the adjacent lands and public interest, have now abstained from doing so due to the severe punishment of the law.

Distribution of Water.

4. According to these rules, The Irrigation Department has absolute authority over the distribution of irrigation water to the various kinds of public channels, as well as the distribution of water of every public channel to private intakes feeding therefrom. The Ministry of Public Works fixes the times for the different rotations and dates of winter closure. The Inspector of Irrigation may forbid at any time, even during working stages, the taking of water from a canal or from a series of public canals, in order to guarantee a fair distribution of water or to avoid supplying the lands with extra amounts of water over their requirements.

Flood Risks.

5. The provisions of this part of the law deal with the rules of protection against flood perils and the safety of the Nile banks during flood period. According to the provisions of the previous law, issued in 1899, the guarding and watching of banks were to be carried out freely by the Aid Men. This compulsory service is perfectly organized by the new law to achieve the objectives for which it was issued. Accordingly, all males aged between 18 and 50 years are asked to cooperate in the flood protection against payment to be fixed annually, before the flood occurs, by the Minister of Public Works.

6. In case of abnormal floods, where urgent protective measures are to be taken, the Minister of Public Works may proclaim, by an Arrêté, the state of danger. In this case, those charged to repel the perils of flood must designate the protective works to be executed, and are also authorized to ask the Administrative Authorities to call up the persons needed to help in the execution of such Works.

Public Canals.

7. The irrigation of lands is effected by a network of public canals which derive their waters from the River Nile as well as from main and branch canals maintained by the Government and at its own expenses. Watercourses "Misquas", which carry public canals' irrigation waters to private-owned lands, were, prior to the issuing of the law, considered private, when they serve an

area up to 1000 feddans. Accordingly, such "Misquas" were to be maintained by individuals at their own expense. The law has put an end to the people's troubles by considering such "Misquas" as public canals, regardless of the extension of the area they serve as long as they are directly connected with the Nile or a public canal and derive their waters from either. Consequently, the maintenance of such watercourses is put under the supervision of the Irrigation Department which distributes waters to all beneficiaries fairly.

Public Drains.

8. According to the law, a channel is considered a public drain, when it is intended for drainage and maintained at the expense of the State. They include main and branch drains. Private drains, serving up to 2,000 feddans of individual property lands, are, according to the law, considered a public concern regardless of the area they serve as long as they are directly connected with the Nile, with a public drain or a lake and flow into any of them.

Private Misquas and Drains.

9. Private "Misquas" and drains are the channels which are cleared and maintained, together with their embankments at the expense of beneficiaries. In adapting itself to modern water uses, the law has entitled applicants to promtly construct such private channels within the area of lands belonging to third parties, provided that their construction cost be on the applicants own charge.

Constructional Works.

10. According to the provisions of the law, no private work or alteration whatever is permitted within the area of Public Domains and dealing with irrigation or drainage unless authorized by the Ministry of Public Works in accordance with the terms it puts and after payment of a duty to be fixed by an order from the Minister of Public Works. The Authorized period must not, in any way exceed 10 years. Neverthless, the Ministry of Public Works may, on the date of expiration of such period, deliver a new authorization with the terms it deems necessary. The applicant, to whom the authorization is delivered, must maintain and keep the work in good condition, He is not permitted to carry out any restoration or alteration thereon, unless he is so authorized, in writing, by the Ministry of Public Works. Private bridges that will be constructed across a public canal or drain will be considered, immediately after construction, as part of the public domains which are under the supervision of the Ministry of Public Works.

Intakes of Canals and the delivery of Drains.

11. The construction of water intakes on the banks of the Nile or public canals is not permitted, without previous authorization from the Ministry of Public Works. If the Inspectorate of Irrigation finds out that the discharge of water at intakes, owned by individuals and lying on a bank of a public canal intended for irrigation, raises above or falls below the requirements of the specific land, due to increase or decrease of their number, their

widening, or raise or fall of their bed level, the Government proceeds with the modification of such intakes at its expense. If it is established by the Inspectorate of Irrigation that there exists more than one way for the irrigation of a certain area of land, the Inspectorate may order the suspension of any water intake it considers supplying surplus water to the said area, or to its share of water. This suspension will be at the expense of the Government. Should the Inspector of Irrigation find out during flood period, that a water intake owned by individuals and lying on the bank of either the Nile or a public canal, is endangering such bank, he may then order the owner or those concerned to remove or close it for a convenient time, otherwise the Inspectorate of Irrigation will proceed with such operation at the Government expense.

Water lifting machines.

12. Water lifting machines are of two kinds: hand-operating and mechanical. The installation and the function of hand-operating water lifting machines may be permitted, without authorization, down-stream the openings assigned for irrigation (i.e. in case any deterioration to the lands of others may be encountered). Such hand-operating machines are used for the irrigation of small areas of lands owned by individuals.

13. The erection of mechanical machines is not permitted on public canals and drains unless authorized by the Inspectorate of Irrigation, which indicates in the licence the site of the lifting machine, its type and a brief description, as well as the terms necessary for its installation and operation. Neverthless, in case such an erection is effected on a joint private water-course on drain, the licensee will be solely responsible for such erection, without any liability to the Government. The Irrigation Department has the right, during the authorized period, to stop the pump or apparatus, for a certain period in favour of other beneficiaries, without any right for the person authorized to claim any compensation. The Irrigation Department may cancel any license, should any contravention to its provisions occur.

14. The Ministry of Public Works has reconsidered the question of irrigation rates by lift pumps deriving their waters from either canals or artesian wells. It has thus issued, in 1953, a law fixing irrigation rates to be paid by beneficiaries to owners of such pumps. Ministrial Decrees, fixing irrigation rates (per feddan) of the various sizes of pumps, according to their lift ranges, are issued on account of the water duties of the different zones of the country. Such rents vary according to the prices of fuel.

15. From the preceding paragraphs, it could be concluded that the law has greatly succeeded in ogranizing irrigation and drainage matters. Furthermore, it renders many facilities to the people to obtain their rights and impose upon them the duties which guarantee the use of the best irrigation and drainage methods leading eventually to the development of the national production.

PART II

Law Issued, Providing Field Drainage to Private Domains Its Effect on the Development of Agricultural Production and Raising the Standard of Living.

16. As a matter of fact, a complete drainage system is the keystone of the development of agricultural production. Once a complete drainage system is provided in favourable plant growing conditions, no obstacles whatever could impede agricultural production reaching a climax. It has been observed that although many farmers successfully apply fertilizers and selected seeds, protect their plants against pest diseases and are well to manage good farm patterns, yet the standard of their production is still below that of model fields and farms. This is because they are unable, due to their limited potentialities, to provide their lands with a complete drainage system, which is one of the basic elements which contributes to increasing the agricultural output. In fact, no fruitful results could be obtained from main public and branch drains unless they are connected with networks of field drains, so as to flow off water from every inch of the cultivated stretch. Otherwise, a narrow belt alongside both banks of public and branch drains will be the only area to enjoy full drainage. Neverthless, the decrease of agricultural production in Egypt is mainly due to the farmer's failure in providing their patches with field drains to feed branch and public drains. However, the main reasons for the decrease of agricultural production are briefly as follows:

(a) Farmers' poor knowledge of the benefits of drains.

(b) Increase of a private-owned patches.

(c) Farmers' financial inability to contribute to the preliminary construction costs of field drains, including the price of the expropriated area required for the passage of drains across other private-owned lands.

(d) Desire of minor landlords to keep their own patches undisturbed by the construction of field drains.

17. In 1937, the Government studied every possible means to generalize the use of field drainage in a more easier way, and eventually adopted a new policy. Accordingly, the construction expenses of small drains, serving the numerous private owned lands, was adopted at the Government's expenses. The landlords concerned were made responsible for the maintenance of such branch drains, as well as for the construction of their field drains and connecting them with the former ones, taking into account that priority be given to feeble lands.

18. In 1949, a law was issued authorizing the Government to undertake the projects intended for open field drains and their connection with public drains, provided that the construction cost therein involved be refunded, within a 20-year period, at annual instalments and a 2% interest. In 1956, and 1962 the said law was modified, and the Ministry of Public Works was thus empowered to expropriate and provisionally posses the lands required for the construction of field drains.

19. However, this modification of the law comprises many provisions regarding the construction of covered and open drains. The maintenance of covered drains is put under the Supervision of the Irrigation Inspectorate and executed at the people's expense. The clearance and maintenance of open field drains are carried out by the beneficiaries at their own expense. Should they fail to do so, the Irrigation Inspectorate proceeds with same and recovers the expenses from them administratively. The following are the most important items of this law:

(a) Art. 1. The agricultural land shall be divided for drainage purposes into units. A drainage unit shall be composed of the total lands, the drainage of which is decided to be by a covered or open drain or group of the said drains contributing to a single outlet on the main drain.

(b) Art. 2. The Ministry of Public Works shall expropriate all lands required for the construction of open field drains and cancel all taxes imposed on the lands expropriated for such purposes. It has also the right to expropriate the lands required for the installation of tile field drainage.

(c) Art. The Ministry of Public Works shall proceed with the construction of both kinds of field drains, provided that all lands included within the area of the drainage units must be connected with a chain of the said drains The Ministry shall also proceed, in case of covered field drains, with the construction of minor field branches within the land areas. In both the foregoing cases, the construction costs shall be distributed over the lands situated within the area of the drainage units. This rule is applicable to the construction costs of both kinds of field drains and the minor branches which have been constructed by the Ministry since March, 14th,1949.

(d) Art. 4. Owners of lands situated within the boundaries of a drainage unit and yet unconnected with either kinds of field drains constructed by the Ministry since 1949, shall have the right to demand the construction, in their lands, of junctions to such drains, provided that they must bear the construction costs therein incurred as well as the widening expenses of the existing field drains proportionately.

(e) Art. 5. The Ministry of Public Works shall prepare a comprehensive statement showing all amounts spent on the construction of both kinds of field drains and the lease and expropriation procedures, including compensation due for the expropriated area, cultivations, buildings, trees, machines "Saquias" as well as any other kind of compensation plus 10% against payment of the administrative expenses.

The Ministry shall then indicate the share of each feddan of the area included in the drainage unit.

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